

REMARKS/ARGUMENTS

The Office Action of June 8, 2005, has been carefully reviewed and this response addresses the concerns stated in the Office Action. All objections and rejections are respectfully traversed.

I. STATUS OF THE CLAIMS

Claims 1-53 and 55-58 are still pending in the application.

Claims 1-13, 15, 20-21, 23-28, 30-32, 34-43, 46, 48, 51-52, 56, and 58 have been amended to further define the invention. No new matter has been added.

Claim 54 has been canceled without prejudice.

Claims 1-14 were rejected under 35 U.S.C. § 101 because the claims are directed to non-statutory subject matter.

Claims 1-4 were rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the invention.

Claims 1-58 were rejected under 35 U.S.C. § 102(e) as being unpatentable over Sampath et al, U.S. Patent No. 6,892, 317, issued May 10, 2005 (Sampath), filed on December 16, 1999.

II. CLAIM REJECTIONS UNDER 35 U.S.C. § 101

On page 2, in paragraphs 1-2, the Office Action states that claims 1-14 are rejected because the claimed invention is directed to non-statutory subject matter. Although Applicant believes that claim 1 as presented meets the statutory requirements of 35 U.S.C. § 101, Applicant has amended claim 1 to explicitly state that the method of the invention provides a prediction, which is a tangible result. Applicant asserts that amended claim 1 meets the statutory requirements of 35 U.S.C. § 101 in that in the claim, the practical application of the algorithm as stated in amended claim 1, results in the useful, tangible result of a prediction.

III. CLAIM REJECTIONS UNDER 35 U.S.C. § 112, SECOND PARAGRAPH

On pages 2-3, in paragraphs 3-8, the Office Action states that claims 1-4 are rejected under 35 U.S.C. § 112, second paragraph.

On page 3, in paragraph 5, the Office Action states that claim 1 is vague and indefinite because it is unclear and lacks concrete steps on how to evaluate the gathered information. Although Applicant does not agree that claim 1 is vague, Applicant has amended claim 1 to state that evaluation of the performance of the network occurs as a result of correlating the gathered real-time status. The amendment is supported in Applicant's specification, page 8, lines 25-27. Applicant asserts that amended claim 1 meets the requirements of 35 U.S.C. § 112 because the concrete step of correlating is recited for evaluating the gathered real-time status information.

On page 3, in paragraph 6-8, the Office Action states that claims 2-4 are vague and indefinite because it is unclear what is an "appropriate" action in preventing performance problem from occurring. Applicant has amended claims 2-4 to eliminate the adjective "appropriate".

IV. CLAIM REJECTIONS UNDER 35 U.S.C. § 102(e)

On pages 3-15 of the Office Action, in paragraphs 9-10, the Office Action has rejected claims 1-58 under 35 U.S.C. § 102(e) as being unpatentable over Sampath.

Applicant respectfully points out that Sampath issued on May 10, 2005, almost five years after the filing date of the present application, October 30, 2000. Applicant is investigating the possibility of swearing behind the cited reference and respectfully reserves the right to file a petition under 37 C.F.R. § 1.131.

Applicant further respectfully points out that the Sampath reference includes a number of technical difficulties including a missing drawing (FIG. 3), and a missing description (FIGs. 3A and 3B). The Office Action also relies upon these deficiencies against Applicant's claimed invention. Also, Sampath asserts but does not enable features of the invention that are cited against Applicant's claimed invention.

Applicant still further respectfully points out that "[a] claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628 (CAFC, 1987), M.P.E.P. § 2131. As provided by the remarks set forth below, clearly this is not the case with the present rejection of the claims. In summary, Sampath does not anticipate Applicant's invention at least because of the following:

- (1) Nowhere does Sampath disclose or suggest Applicant's claimed polling resources of the network (Applicant's amended independent claims 1, 15, and 30). Sampath's electronic systems themselves gather and forward status information to Sampath's diagnostic server. The diagnostic server is a passive receptor of status information. Thus, Sampath does not anticipate Applicant's claimed polling resources in the network.
- (2) Nowhere does Sampath disclose or suggest Applicant's claimed evaluating performance of the network by correlating the gathered real-time status information (Applicant's amended independent claims 1, 15, and 30). Sampath states that failure prediction and diagnoses of electronic systems can be achieved (Sampath's Abstract). Sampath further defines an electronic system to include memory, a controller, an I/O interface, a data acquisition circuit, a prediction/diagnostic circuit, a repair planning circuit, an autonomous repair circuit a data pooling circuit, a routing circuit, and a database (Sampath's col. 4, lines 21-27). Even the broadest interpretation of Sampath could not equate an electronic system so described to Applicant's claimed network. Thus, Sampath cannot anticipate Applicant's claimed evaluating performance of a network by correlating the gathered real-time status information.
- (3) Nowhere does Sampath disclose or suggest Applicant's claimed providing a prediction of a future network performance problem (Applicant's amended independent claims 1, 15, and 30). Sampath states that real-time failure prediction and diagnoses of electronic systems operating in a network environment can be achieved (Sampath's Abstract). However,

problems with individual components may or may not indicate Applicant's claimed future network performance problem. It is only when problems across the network are correlated that a predication of a network performance problem can be made. Sampath states that a determination of an appropriate action to take based on data from electronic systems can be based on a direct correlation of the received data to an appropriate remedial action. But nowhere does Sampath correlate the gathered real-time status information and provide a prediction of a future network performance problem. Thus, Sampath does not anticipate Applicant's claimed providing a prediction of a future network performance problem.

- (4) No citation is provided against claim 25. Thus, Applicant asserts that Sampath does not anticipate Applicant's claim 25.

On pages 4, with respect to claims 1-4, the Office Action states that Sampath discloses:

(1) A method of managing a network comprising the steps of: polling resources of the network to gather real-time status information about the network, evaluating the gathered real-time status information; and based on the gathered real-time status information, predicting whether a future performance problem is to be encountered within the network (independent claim 1);

(2) The method of claim 1 further comprising the step of: determining an appropriate action for preventing said performance problem from occurring (dependent claim 2); the method of claim 2 wherein said determining step includes determining said appropriate action from at least one previously defined rule (dependent claim 3); and the method of claim 2 further comprising the step of initiating said appropriate action before said performance problem occurring in an attempt to prevent said performance problem (dependent claim 4) (Abstract; col. 1, line 33 -- col. 2, line 30).

In the first cited passage (the Abstract), Sampath states that the diagnostic system requests data on the state of a machine and/or its components and collections thereof as part of the machine's normal operation. However, nowhere in Sampath is this capability enabled

by the diagnostic server which is the system that is described in Sampath. Instead, Sampath states that the electronic systems generate status information during the course of operation or in response to specific interrogation and control commands issued by an external agent, or any method of assembling information pertaining to the electronic system for forwarding to the appropriate destination (col. 5, lines 35-37). Sampath further defines “agent” as an autonomous repair agent that generates autonomous interrogation commands and control signals (col. 9, lines 29-35). Sampath goes on to state that the status information circuit (part of the electronic system – see Sampath’s FIG. 1) forwards the status information to the diagnostic server (col. 5, lines 40-42). Clearly Sampath intended for the diagnostic server to be a passive recipient of status information from the electronic system. Nowhere does Sampath disclose or suggest polling by the diagnostic server.

In the second cited passage (col. 1, line 33 -- col. 2, line 30), Sampath states that a plurality of electronic systems is connected to a diagnostic server that receives data from the electronic systems. Sampath states that the data allows for the determination of system faults (of the electronic systems) and for the initialization of repair action. Sampath further states that the repair action can be determined based on a direct correlation of the data to an action, or from a database that stores information for similar systems. Sampath even further states that the diagnostic server determines how to route a request for the action. Sampath states that, as an example, if the electronic systems are operating in a network, the diagnostic server monitors the electronic systems, for example, a printer, for faults such as when a page count reaches a threshold, and then sends a notice to the printer vendor. In other words, the diagnostic server of Sampath diagnoses problems of individual components, but not the network as a whole.

With respect to claim 1, as stated previously, Sampath does not disclose Applicant’s claimed polling resources of the network. Although Sampath states that electronic systems are “monitored”, Sampath enables this statement by explaining that the status information is gathered by a status information circuit 250 -- see Sampath FIG. 1, the status information circuit is part of the electronic system -- which forwards the status information to the diagnostic server (col. 5, lines 39-42). Thus, Sampath does not rely on polling to collect information and does not anticipate Applicant’s claimed step of polling.

With respect to independent claim 1 and dependent claims 2-4, Applicant has amended clause 2 of claim 1 to further define the invention. Support for the amendment can be found in Applicant's specification, page 7, lines 4-21 and page 8, lines 20-25. In particular, Applicant has specifically claimed evaluating performance of the network. Although Sampath may be using the interconnection of the electronic systems and the diagnostic server to route information, neither the diagnostic server nor any component of Sampath is performing Applicant's claimed step of evaluating performance of the network. Further, Applicant states on page 7, in lines 4-21, of Applicant's specification, that prior art systems have the limitations of Sampath, in particular the narrow view of diagnosing problems in each electronic system autonomously, but not diagnosing problems of a network. Applicant was aware of systems such as the system of Sampath and Applicant's invention improved upon them. For the reasons stated above, Sampath does not anticipate Applicant's claimed evaluating performance of the network.

With further reference to independent claim 1 and dependent claims 2-4, Applicant has amended clause 3 of claim 1 to further define the invention. Support for the amendment can be found in Applicant's specification, page 8, line 25 – page 9, line 4. In particular, Applicant claims providing a prediction of a future network performance problem. As previously stated, Sampath states that faults in individual electronic systems are diagnosed and predicted. In the system of Sampath, individual electronic systems such as printers are monitored and even prophylactically repaired. Sampath does not disclose or suggest any evaluation, identification, or prediction of network-wide problems. Thus Sampath cannot anticipate Applicant's claimed evaluating performance of the network in order to provide a prediction of a future network-wide problem.

Since Sampath does not disclose each and every element of Applicant's independent claim 1 (and claims 2-4, which depend therefrom), Applicant's independent claim 1 (and claims 2-4 which depend therefrom) is not anticipated by Sampath. A rejection under 35 U.S.C. § 102(e) is therefore inappropriate.

On pages 6, 7, 9-13, and 15, with respect to claims 15, 30, 39, 40, 41, 42, 43, 56, 57, and 58, the Office Action states that

(1) A system for managing a network, said system comprising at least one polling gateway that is operable to gather real-time status information for one or more network elements; at least one processor-based management server communicatively coupled to at least one polling gateway to receive the gathered real-time status information from said at least one polling gateway; and the at least one processor-based management server predicting the occurrence of a performance problem within the network based on the gathered real-time status information (independent claim 15).

(2) A management system for managing one or more layers of a network, wherein said managing includes predicting performance problems that are to occur within one or more layers of the network and taking responsive actions in an attempt to prevent or timely respond to predicted performance problems, said management system comprising at least one processor-based management server communicatively coupled to at least one polling gateway that is operable to poll at least one network element to gather real-time status information for said at least one network element the at least one processor-based management server including software code executing thereon, wherein said software code learns a condition for predicting a performance problem within the network from said gathered real-time status information to enable the processor-based management server to predict the occurrence of a performance problem within the network (independent claim 30); and

(3) The management system of claim 37 wherein upon detection of said defined condition, said at least one processor-based management server initiates said appropriate action before said performance problem occurring (dependent claim 39); the management system of claim 30 wherein said learned condition includes a pattern for status information that foreshadows the occurrence of a performance problem (dependent claim 40); the management system of claim 30 wherein said learned condition includes statistical analysis of said status information that foreshadows the occurrence of a performance problem (dependent claim 41); the management system of claim 30 wherein said learned condition includes correlation of status information that foreshadows the occurrence of a performance problem (dependent claim 42); the management system of claim 30 wherein said performance problem is any one or more of the problems selected from operability problem of one or more network elements, operability problem of the network, failure of one or more network elements, failure of the network, integrity problem of one or more network elements,

integrity problem of the network, efficiency problem of one or more network elements, efficiency problem of the network, decreased processing speed of one or more network elements, decreased processing speed of the network, usage capacity problem of one or more network elements, and usage capacity problem of the network (dependent claim 43); the management system of claim 55 wherein said performance problem includes a network element performance problem (dependent claim 56); the management system of claim 30 wherein said management system includes a plurality of at least the following layers: business management layer, service management layer, network management layer, and element management layer, and wherein a plurality of said layers are correlated within said at least one rule (dependent claim 57); and the management system of claim 30 wherein said management system includes a plurality of at least the following layers: business management layer, service management layer, network management layer, and element management layer, and wherein said performance problem is a problem within any of said plurality of layers (dependent claim 58) (Abstract; col. 1, line 33 – col. 2, line 30; col. 2, line 34 – col. 3, line 50; col. 6, line 17 – col. 7, line 45).

The shortcomings of the first and second cited passages have been set forth above with respect to claims 1-4 and will not be repeated here. In the third cited passage (col. 2, line 34 – col. 3, line 50), Sampath states that the invention provides for acquiring and processing data to facilitate failure prediction, diagnosis, and remediation, determining an appropriate action based on data received from the electronic systems, generation and routing of data, automatic scheduling of service for the electronic system, automated remediation of faults, remote interrogation and control of electronic systems, use of pooled information from the electronic systems to develop and derive additional prediction, diagnosis and remediation methodologies, and presentation of results of failure prediction, diagnosis, and remediation. Sampath states that based on an appropriate action determined by a diagnostic server, the appropriate assistance is provided to the electronic system.

In the fourth cited passage, Sampath states that the prediction/diagnostics circuit 150 (part of the diagnostics server 100, see FIG. 1) determines if the status information is prediction or diagnostic information. Sampath defines prediction information to be any status information that is pertinent to determining whether an action should be taken to avoid a particular impending outcome. Sampath states that the prediction/diagnostic analysis can be

based on a variety of analysis techniques including threshold, statistical, neural network, rule-based system, expert system, among others, and can rely on data in a database. Sampath states that the repair planning circuit determines an appropriate action in response to the received status information, and the routing circuit routes the action request to the appropriate service, repair, parts supplier, or autonomous repair agent. Sampath states that the diagnostic server can, in automatic repair mode, forward command and control signals to the electronic system to initialize an automatic repair sequence.

In other words, the four cited passages state that the diagnostics server of Sampath receives status data forwarded from electronic systems, and predicts, diagnoses, and remediates any possible faults with the electronic systems individually.

Applicant has amended independent claim 15 to further define the invention. Support for the claim amendments can be found in Applicant's specification, page 8, lines 10-12 and 15. In particular, Applicant has clarified that the real-time status information is gathered by polling the network elements. As stated previously, Sampath does not disclose or suggest that the diagnostic server polls the electronic systems. Applicant has further amended claim 15 to clarify that the at least one processor-based management server predicts the occurrence of a network-wide performance problem, not simply a problem with an individual network element. As stated previously, Sampath does not disclose or suggest predicting network-wide problems, but instead focuses on predicting problems with individual elements to which the diagnostic server is electronically connected.

Further, Sampath does not disclose Applicant's claimed polling gateway or processor-based management server. In the system of Sampath are a diagnostic server, electronic systems, and other external systems (see Sampath's FIG. 1). Applicant's claimed one or more network elements can be considered analogous to Sampath's electronic system. Applicant's claimed at least one polling gateway could be considered physically analogous to Sampath's diagnostic server, but Sampath's diagnostic server does not poll Sampath's electronic systems. There is no analog in Sampath for Applicant's claimed at least one processor-based management server. In the system of Sampath, the diagnostic server collects information from the electronic systems and manages diagnosis, prediction, and remediation of faults for the individual systems. There is no system in Sampath that collects status

information from the diagnostic server(s) to predict the occurrence of a network-wide performance problem based on the status information. Thus, Sampath cannot anticipate Applicant's independent claim 15 (and claims 16-29 which depend therefrom).

With respect to independent claim 30 (and claims 31-53 and 55-58 which depend therefrom), nowhere does Sampath disclose or suggest network layers, and thus cannot anticipate Applicant's claimed system for managing one or more layers of a network. As stated previously, the invention of Sampath is limited to diagnosing, predicting, and remediating problems of individual electronic systems. Sampath states that these systems could be networked together, but Sampath's analysis of problems does not relate to any network that might be present. Sampath could perform the stated analysis with a point-to-point connection between the electronic system and the diagnostic server. The network of Sampath is not part of Sampath's analysis. Further, as previously stated, Sampath does not disclose Applicant's processor-based management server communicatively coupled to at least one polling gateway. The reasoning for this assertion has been stated previously and will not be repeated here.

Applicant has amended claim 30 to further define the invention. Support for the amendments can be found in the preamble of the claim itself and in Applicant's specification, page 8, lines 10-12 and 15. In particular, Applicant claims software code that learns a condition for predicting said network-wide performance problem within one or more layers of the network. As stated previously, Sampath confines prediction capabilities to predicting faults in monitored electronic systems. According to Sampath's FIG. 1, a monitored electronic system includes memory, a controller, an I/O interface, a diagnostic display, and a status information circuit. Nowhere does Sampath disclose or suggest that the monitored electronic system includes network layers or is a network. FIG. 1 teaches away from such a conclusion as well. A network is composed of network elements that communicate through commonly-understood protocols. A network itself does not have a status information circuit, the circuit by which status information is gathered in the system of Sampath. Thus, the system of Sampath could not be used as Sampath states to perform Applicant's claimed software code that learns a condition for predicting said network-wide performance problem within one or more layers of the network. Sampath therefore does not anticipate Applicant's independent claim 30 (and claims 31-53 and 55-58 which depend therefrom).

Since Sampath does not disclose each and every element of Applicant's independent claims 15 and 30 (and claims 16-29, 31-53, and 55-58, which depend therefrom), Applicant's independent claims 15 and 30 (and claims 16-29, 31-53, and 55-58, which depend therefrom) are not anticipated by Sampath. A rejection under 35 U.S.C. § 102(e) is therefore inappropriate.

Applicant asserts that dependent claims 2-24, 16-29, 31-53, and 54-58 are in condition for allowance based at least on their dependence on independent claims 1, 15, and 30. Other arguments with respect to these dependent claims follow.

On page 6, with respect to claim 13, the Office Action states that Sampath discloses the method of claim 3 further comprising said at least one rule correlating disparate characteristics of one or more network elements (col. 6, line 17 – col. 7, line 11). Sampath states, in the cited passage, that processing the prediction information can comprise, with the cooperation of the data pooling circuit, the querying of database 170 for similar status information received from one or more of the monitored electronic systems. Sampath also states that one or more secondary knowledge and/or information sources can be accessed and integrated to improve the reliability of the prognostic analysis. In other words, Sampath uses historical status information to improve current failure prediction for a particular electronic system. Sampath does not disclose or suggest Applicant's claimed at least one rule correlating disparate characteristics of one or more network elements in the context of predicting network-wide performance problems.

On page 6, with respect to claim 14, the Office Action states that Sampath discloses the method of claim 13 wherein said disparate characteristics include those selected from CPU run queue capacity, CPU run queue blocks,, CPU run queue waits, context switching, memory paging, swap allocation, disk writes, disk blocking, disk waiting, disk utilization, network inbound packets, network outbound packets, network error, and network collisions (520). Sampath illustrates in FIG. 1 controller 520 which is part of parts/consumable supplier 500. Sampath states that parts/consumable supplier forwards an action request to parts coordination circuit 540 with the cooperation of control 520 (col. 8, lines 16-20). Applicant fails to find in the cited reference number and accompanying passage anything that anticipates Applicant's dependent claim 14.

On page 7, with respect to claims 18 and 19, the Office Action states that Sampath discloses the system of claim 15 wherein said at least one polling gateway includes a plurality of distributed polling gateways (claim 18), and the system of claim 15 wherein said plurality of distributed polling gateways include polling gateways that are each operable to poll particular ones of disparate network elements (col. 10, line 10 – col. 11, line 60; 140, 600). In the cited passage, Sampath describes FIG. 3 which is not present in Sampath. Sampath states that, in step S25 in FIG. 3, a distributed call can be made to additional servers with diagnostics and prognostics capabilities, and that the diagnostic analysis results are stored in the diagnostics server database. Not only is FIG. 3 not present, but the functionality, structure, or communication with the diagnostic server of the “additional servers” are nowhere enabled in Sampath. The Office Action cites data acquisition circuit 140 and OEM server provider 600, which are described in col. 5, line 56 and col. 8, lines 48-60 respectively. Sampath states that data acquisition circuit 140 forwards status information to the database 170 and prediction/diagnostics circuit 150. In other words, the diagnostic server of Sampath, of which data acquisition circuit is a part, forwards data from the electronic system to either a database or another circuit. Applicant claims, on the contrary, a plurality of distributed polling gateways that are each operable to poll particular ones of disparate network elements. Nowhere in the cited passage or with respect to the cited reference numbers is there a description or suggestion of Applicant’s claimed plurality of distributed polling gateways for polling particular ones of disparate network elements. Therefore, Sampath cannot anticipate Applicant’s dependent claims 18 and 19.

On pages 7 and 11, with respect to claim 20 and 35, the Office Action states that Sampath discloses the system of claim 19 wherein said disparate network elements include network elements that communicate in different protocols (claim 20), and the management system of claim 34 wherein said disparate network elements include network elements that communicate in different protocols (claim 35) (“the prediction/diagnostic circuit 150 processes the prediction information in accordance with a number of protocols”).

Applicant has amended claims 20 and 35 to clarify that protocols are network protocols. The cited passage in Sampath is taken from a paragraph in col. 6, lines 17-57. In the paragraph, Sampath states that the prediction/diagnostics circuit determines if the status information is prediction or diagnostic information. Sampath defines prediction information

and gives an example of a monitored electronic system that is a printer. Sampath states that if the states information relates to a threshold, then the status information can be used predictively. Then Sampath states that the prediction/diagnostic circuit processes prediction information in accordance with a number of protocols and that the analysis can be based on a variety of analysis techniques. A protocol is simply a rule, and doesn't necessarily relate to Applicant's claimed network protocol. In this case, Sampath seems to be stating that prediction and diagnosis can be accomplished according to a variety of rules, some of which are listed in terms of analysis techniques such as threshold analysis, statistical analysis, etc. Sampath is not, in this passage, discussing Applicant's claimed network protocols, which are commonly known in the industry to mean such rules as those embodied in, for example, TCP/IP. Therefore, Sampath can not anticipate Applicant's dependent claims 20 and 35.

On page 9, with respect to claim 29, the Office Action states that Sampath discloses the system of claim 15 wherein said status information includes one or more from network status, disk status, database status, memory status, CPU status, and operating system status (FIG. 3B). The cited figure and its referenced elements are not described within the disclosure of Sampath. FIG. 3B includes repair event, machine ID, failure ID, distributed object calls, server based diagnostic objects, data mining database, CSE and CSE laptop service request notification, data mining batch data, and service support extranet, but Applicant fails to find, on FIG. 3B, Applicant's claimed status information. Therefore, Sampath does not anticipate Applicant's claim 29.

On page 10, with respect to claim 33, the Office Action states that Sampath discloses the management system of claim 30 wherein said at least one polling gateway includes a plurality of distributed polling gateways (col. 10, line 47 – col. 7, line 8). Applicant respectfully requests a proper citation.

On page 10, with respect to claim 34, the Office Action states that Sampath discloses the management system of claim 30 wherein said plurality of distributed polling gateways include polling gateways that are each operable to poll particular ones of disparate network elements (100). The cited reference number refers to Sampath's diagnostic server which includes a data acquisition circuit, prediction/diagnostics circuit, data pooling circuit, routing circuit, autonomous repair circuit, memory, controller, I/O interface, database, and repair planning circuit. None of these parts that define the diagnostic server performs Applicant's

claimed polling gateway operable to poll particular ones of disparate network elements. Sampath states that the monitored electronic system routes, through I/O interface, controller, and memory, status information to the data acquisition circuit (col. 5, lines 51-55). Sampath states that the data acquisition circuit forwards the status information to the database and prediction/diagnostic circuit. There are no elements in Sampath's diagnostic server 100 that perform Applicant's claimed polling particular ones of disparate network elements.

On page 13, with respect to claim 45, the Office Action states that Sampath discloses the management system of claim 30 wherein said at least one network element is represented as an object within object-oriented software executing on the processor-based serve, said object having one or more attributes for which said status information may be gathered (col. 9, lines 5-50). In the cited passage Sampath states that diagnostic data includes raw data and data that result from diagnostic procedures, and examples are provided. Sampath states that interrogation commands and control signals are representative of interrogation command and control signals passed between one or more service engineers and the particular electronic system or commands generated by an autonomous repair agent. Sampath further states that the diagnostic server and the monitored electronic system and the various service suppliers can be incorporated into one or more of the other systems of Sampath. Elsewhere, Sampath states that the disclosed method may be implemented in software using object or object-orient software development environments (col. 13, lines 1-3). However, nowhere does Sampath disclose or suggest Applicant's claimed network element represented as an object having one or more attributes for which status information may be gathered. Thus, Sampath does not anticipate Applicant's dependent claim 45.

On page 13, with respect to claim 46, the Office Action states that Sampath discloses the management system of claim 45 wherein said learned condition includes correlation of one or more attributes of one or more objects to define the prediction of a performance problem (col. 3, line 43 – col. 4, line 3). In the cited passage, Sampath states that since the electronic devices, diagnostic server, and parts and service providers are all interconnected, the system is capable of pooling diagnostic data received from the plurality of electronic systems to provide a richer database from which failure prediction analysis can be generated. In other words, Sampath uses diagnostic information from multiple electronic systems to provide background for predicting failure of a particular electronic system. Sampath does

not, however, disclose or suggest a learned condition that includes correlation of attributes of objects (that represent network elements) to define the prediction of a performance problem. Further, Applicant has amended claim 46 to specify that the claimed performance problem is a network-wide performance problem. Applicant asserts that Sampath does not anticipate either the original or the amended dependent claim 46 for the reasons stated above.

On pages 13 and 14, with respect to dependent claims 47, 48, 49, 50, 51, 52, and 53, the Office Action states that Sampath discloses the management system of claim 30 wherein said management system includes a business management layer (claim 47), the management system of claim 47 wherein said performance problem includes a business performance problem (claim 48), the management system of claim 48 wherein said at least one network element includes an electronic commerce system for processing commercial transactions with customers via the Internet, and wherein said business performance problem includes a problem resulting in inability of said electronic commerce system processing said commercial transactions (claim 49), the management system of claim 30 wherein said management system includes a service management layer (claim 50), the management system of claim 50 wherein said performance problem includes a service performance problem (claim 51), the management system of claim 51 wherein said service performance problem includes problem with the quality provided to subscribers or clients of the managed network (claim 52), and the management system of claim 30 wherein said management system includes a network management layer (claim 53) (400, 700).

In the description of the cited reference numbers (400, 700), Sampath states that value added service provider 400 comprises memory, controller, prediction/diagnostic circuit, repair planning circuit, autonomous repair circuit, I/O interface and service coordination circuit connected by link 75. Sampath further states that secondary knowledge servers 700 comprise memory, controller, I/O interface, service coordination circuit, all interconnected by link 75. Sampath even further states that value added service provider 400 receives action requests for scheduling and performing service. In other words, Sampath provides mechanisms for diagnosed and predicted failures of electronic systems to be managed by value added service provider 400 and secondary knowledge servers 700. These system are not described in any detail in Sampath, and nowhere is there a reference in the passages that refers to these cited elements as Applicant's claimed business management layer (claim 47),

business performance problem (claim 48), and electronic commerce system for processing commercial transactions with customers via the Internet (claim 49), service management layer (claim 50), service performance problem (claim 51), problem with quality provided to subscribers or clients of the network (claim 52), or network management layer (claim 53). Applicant fails to understand how the cited reference anticipates Applicant's claims 47-53.

Applicant asserts that independent claims 1, 15, and 30, and claims 2-14, 16-29, 31-53, and 55-58, which depend therefrom, are now in condition for allowance. Applicant respectfully requests the withdrawal of the rejection under 35 U.S.C. § 102(e) with regards to independent claims 1, 15, and 30, and claims 2-14, 16-29, 31-53, and 55-58, which depend therefrom for the reasons set forth above. App also asserts that a 35 U.S.C. § 103 rejection is also inappropriate.

V. CONCLUSION

Independent claims 1, 15, and 30 are believed to be in condition for allowance. Applicant asserts that all dependent claims depend upon allowable independent claims, and are therefore also believed to be in condition for allowance for the same reasons, and further are considered patentable for the additional subject matter contained therein.

Applicant respectfully points out that Sampath issued on May 10, 2005, almost five years after the filing date of the present application, October 30, 2000. Applicant is investigating the possibility of swearing behind the cited reference and respectfully reserves the right to file a petition under 37 C.F.R. § 1.131.

Applicant is timely filing this response on October 11, 2005, because the date upon which the response with one-month extension was due to be filed, October 8, 2005, falls on a Saturday, and the following Monday is a federal holiday. The Commissioner for Patents is authorized to charge the extension fee and any additional fees or credit overpayment to Deposit Account No. 50-1078.


Appl. No. : 09/702,160
Response/Amendment dtd. October 11, 2005
Reply to Office Action of June 8, 2005

The following information is presented in the event that a call may be deemed desirable by the Examiner:

Jacob N. Erlich (617) 854-4000

Date: October 11, 2005

Respectfully submitted,
Thomas C. Harrop, Applicant

By: 
Jacob N. Erlich
Reg. No. 24,338
Attorney for Applicant